



**STATE OF TENNESSEE  
DEPARTMENT OF HEALTH  
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL  
Lab Services - Jackson Regional Lab  
Jackson, TN 38301  
731-426-0686

TDH: Lab Services KRL  
Lab Services - Knoxville Regional Lab  
Knoxville, TN 37920  
865-549-5201

TDH: Lab Services NCL  
Lab Services - Nashville Central Lab  
Nashville, TN 37243  
615-262-6300

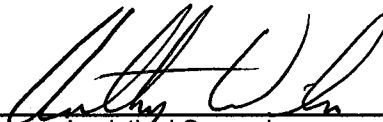
**Sent To:** Geoff Klein  
TDEC-DWS  
200 East Race St  
Knoxville, TN 37763

**Lab ID:** N00004929  
Nashville Central Laboratory

**Sampling Agency:** TDEC: Division of Water Supply

**Billing Code:** 327.39-12

This is to certify that the following results were determined using  
good laboratory practices and in accordance with federal or state  
approved methodologies.

  
\_\_\_\_\_  
Analytical Supervisor

**Lab-Sample Number:** N00004929001  
**Project Name:**  
**Sample Description:** KINGSTON WTP  
**Sampler Project Name:** RAW  
**Project Site No.:**  
**Station No.:**  
**Date/Time Collected:** 08/17/2009 09:20  
**Sampler's Name:** GEOFF KLEIN  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Nashville  
**Sampling Agency:** TDEC-DWS  
**Billing Code:** 327.39-12  
**Send Report To:** TDEC-DWS  
**Agency Invoiced:** TDEC-DWS  
**Priority Date:**  
**Date/Time Received:** 08/17/2009 12:50  
**Received By:** P D Wilson

**Field Determinations**

**pH:**  
**Chlorine, residual:**  
**Conductivity:**  
**Temperature:**  
**Dissolved Oxygen:**  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	08/18/2009				M Pattanayek	8/18/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Arsenic	U	µg/L	0.93	5	M Pattanayek	8/18/2009
Barium	27	µg/L	2.5	5	M Pattanayek	8/18/2009
Beryllium	0.16J	µg/L	0.11	1	M Pattanayek	8/18/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	8/18/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	8/18/2009
Cobalt	0.30J	µg/L	0.04	1	M Pattanayek	8/18/2009
Lead	0.30J	µg/L	0.10	1	M Pattanayek	8/18/2009
Manganese	30	µg/L	0.42	1	M Pattanayek	8/18/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	8/18/2009
Thallium	0.42J	µg/L	0.03	1	M Pattanayek	8/18/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	8/18/2009

TEST: Mercury			METHOD: EPA 245.1			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	M Pattanayek	8/19/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** N00004929002  
**Project Name:**  
**Sample Description:** KINGSTON WTP  
**Sampler Project Name:** FINISH  
**Project Site No.:**  
**Station No.:**  
**Date/Time Collected:** 08/17/2009 09:25  
**Sampler's Name:** GEOFF KLEIN  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Nashville  
**Sampling Agency:** TDEC-DWS  
**Billing Code:** 327.39-12  
**Send Report To:** TDEC-DWS  
**Agency Invoiced:** TDEC-DWS  
**Priority Date:**  
**Date/Time Received:** 08/17/2009 12:50  
**Received By:** P D Wilson

**Field Determinations**

**pH:**  
**Chlorine, residual:**  
**Conductivity:**  
**Temperature:**  
**Dissolved Oxygen:**  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	08/18/2009				M Pattanayek	8/18/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Arsenic	U	µg/L	0.93	5	M Pattanayek	8/18/2009
Barium	29	µg/L	2.5	5	M Pattanayek	8/18/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	8/18/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	8/18/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	8/18/2009
Cobalt	0.11J	µg/L	0.04	1	M Pattanayek	8/18/2009
Lead	U	µg/L	0.10	1	M Pattanayek	8/18/2009
Manganese	U	µg/L	0.42	1	M Pattanayek	8/18/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	8/18/2009
Thallium	0.12J	µg/L	0.03	1	M Pattanayek	8/18/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	8/18/2009

TEST: Mercury			METHOD: EPA 245.1			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	M Pattanayek	8/19/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** N00004929003  
**Project Name:**  
**Sample Description:** ROCKWOOD WTP  
**Sampler Project Name:** FINISH  
**Project Site No.:**  
**Station No.:**  
**Date/Time Collected:** 08/17/2009 10:10  
**Sampler's Name:** GEOFF KLEIN  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Nashville  
**Sampling Agency:** TDEC-DWS  
**Billing Code:** 327.39-12  
**Send Report To:** TDEC-DWS  
**Agency Invoiced:** TDEC-DWS  
**Priority Date:**  
**Date/Time Received:** 08/17/2009 12:50  
**Received By:** P D Wilson

**Field Determinations**

**pH:**  
**Chlorine, residual:**  
**Conductivity:**  
**Temperature:**  
**Dissolved Oxygen:**  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	08/18/2009				M Pattanayek	8/18/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Arsenic	U	µg/L	0.93	5	M Pattanayek	8/18/2009
Barium	28	µg/L	2.5	5	M Pattanayek	8/18/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	8/18/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	8/18/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	8/18/2009
Cobalt	0.06J	µg/L	0.04	1	M Pattanayek	8/18/2009
Lead	U	µg/L	0.10	1	M Pattanayek	8/18/2009
Manganese	0.73J	µg/L	0.42	1	M Pattanayek	8/18/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	8/18/2009
Thallium	0.05J	µg/L	0.03	1	M Pattanayek	8/18/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	8/18/2009

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	M Pattanayek	8/19/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** N00004929004  
**Project Name:**  
**Sample Description:** ROCKWOOD WTP  
**Sampler Project Name:** RAW  
**Project Site No.:**  
**Station No.:**  
**Date/Time Collected:** 08/17/2009 10:15  
**Sampler's Name:** GEOFF KLEIN  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Nashville  
**Sampling Agency:** TDEC-DWS  
**Billing Code:** 327.39-12  
**Send Report To:** TDEC-DWS  
**Agency Invoiced:** TDEC-DWS  
**Priority Date:**  
**Date/Time Received:** 08/17/2009 12:50  
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**Field Determinations**

**pH:**  
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**Conductivity:**  
**Temperature:**  
**Dissolved Oxygen:**  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	08/18/2009				M Pattanayek	8/18/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Arsenic	0.93J	µg/L	0.93	5	M Pattanayek	8/18/2009
Barium	32	µg/L	2.5	5	M Pattanayek	8/18/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	8/18/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	8/18/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	8/18/2009
Cobalt	0.19J	µg/L	0.04	1	M Pattanayek	8/18/2009
Lead	1.5	µg/L	0.10	1	M Pattanayek	8/18/2009
Manganese	30	µg/L	0.42	1	M Pattanayek	8/18/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	8/18/2009
Thallium	0.04J	µg/L	0.03	1	M Pattanayek	8/18/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	8/18/2009

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	M Pattanayek	8/19/2009

J - Estimated value between MDL and MQL  
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 MQL - Method Quantitation Limit  
 U - Undetected